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Panel 2 - Fatigue & Operating Experience Analysis

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Fatigue & Operating Experience Analysis

- ## The Risks

  - ### Increased Complexity - Workload

    - More Demands/Load on Fewer Controllers
    - More Changes Occurring in Pipelines
    - Higher Potential for Fatigue / Misoperation
    - Is the Computer Working for the Controller or the Controller for the Computer?

  - ### Increasing Pressures on Control Rooms

  - ### Higher Potential for Management Team Setup

Fatigue & Operating Experience Analysis

- **Core Area 6 - Fatigue**
  - **Real and Increasing Risks**
    - Control Room - Long Periods of Boredom Punctuated by High Adrenalin Events
    - Does Control Room & SCADA Maintain Controller Alertness?
    - How to Identify and Present Abnormal Events
    - Human Performance Experts Utilized?
  - **Needs to Be Addressed Not Overworked in Regs**
    - Must Track Overtime / Consecutive Shifts
    - Addressing Various Fatigue Issues Helps but <u>Won't Resolve</u> Poor Management / SCADA Approaches
    - See Accufacts' Panel 1 SCADA Hierarchy

Fatigue & Operating Experience Analysis

- **<u>Core Area 7 Analysis of Operating Experience & Contributing Factors</u>**

  Trigger Events Clearly Defined?
  - Primary Control Room Objective Must be Clearly Identified and Communicated

  - **Lessons Learned Process**
    - Auditable
    - Feedback Loop
    - Who Reviews?
      - Must Go Beyond Control Room